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Docket No.: 52-026

ND-23-0199 10 CFR 52.99(c)(1)

U.S. Nuclear Regulatory Commission Document Control Desk Washington, DC 20555-0001

Southern Nuclear Operating Company
Vogtle Electric Generating Plant Unit 4
ITAAC Closure Notification on Completion of ITAAC 2.6.02.02a [Index Number 593]

Ladies and Gentlemen:

In accordance with 10 CFR 52.99(c)(1), the purpose of this letter is to notify the Nuclear Regulatory Commission (NRC) of the completion of Vogtle Electric Generating Plant (VEGP) Unit 4 Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC) Item 2.6.02.02a [Index Number 593] for verifying that the Non-Class 1E DC and Uninterruptible Power Supply System (EDS) Battery Chargers supply the coresponding DC switchboard bus load while maintaining the battery charged. The closure process for this ITAAC is based on guidance described in Nuclear Energy Institute (NEI) 08-01, "Industry Guideline for the ITAAC Closure Process under 10 CFR Part 52," which was endorsed by the NRC in Regulatory Guide 1.215.

This letter contains no new NRC regulatory commitments. Southern Nuclear Operating Company (SNC) requests NRC staff confirmation of this determination and publication of the required notice in the Federal Register per 10 CFR 52.99.

If there are any questions, please contact Kelli Roberts at 706-848-6991.

Respectfully submitted,

Jamie M. Coleman

Regulatory Affairs Director Vogtle 3 & 4

Enclosure: Vogtle Electric Generating Plant (VEGP) Unit 4

Completion of ITAAC 2.6.02.02a [Index Number 593]

JMC/KIK/sfr

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CC:

Regional Administrator, Region II Director, Office of Nuclear Reactor Regulation (NRR)

Director, Vogtle Project Office NRR Senior Resident Inspector – Vogtle 3 & 4

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Enclosure

Vogtle Electric Generating Plant (VEGP) Unit 4 Completion of ITAAC 2.6.02.02a [Index Number 593] U.S. Nuclear Regulatory Commission ND-23-0199 Enclosure Page 2 of 3

ITAAC Statement

Design Commitment:

2.a) Each EDS load group 1, 2, 3, and 4 battery charger supplies the corresponding dc switchboard bus load while maintaining the corresponding battery charged.

Inspections, Tests, Analyses:

Testing of each as-built battery charger will be performed by applying a simulated or real load, or a combination of simulated or real loads.

Acceptance Criteria:

Each battery charger provides an output current of at least 900 amps with an output voltage in the range 105 to 140 V.

ITAAC Determination Basis

Testing was performed in accordance with Unit 3 component test package work orders as documented in Reference 1 and Factory Acceptance Testing (FAT) (Reference 2) which demonstrated that each as-built Non-Class 1E direct current (dc) and Uninterruptible Power Supply System (EDS) load group 1, 2, 3, and 4 battery charger identified in the Combined License (COL) Appendix C, Table 2.6.2-2 supplies the corresponding dc switchboard bus load while maintaining the corresponding battery charged.

The component test utilized a load bank to simulate the most limiting loads on each EDS load group battery charger, totaling the value of a fully discharged battery and a full load from the dc switchboard. The EDS battery bank and dc switchboard were disconnected from the battery charger and a load bank was then connected to the output of the battery charger. The EDS battery charger output current and output voltage was measured using the load bank instrumentation and recorded on data sheets included in component test package work orders in Reference 1. The current and output voltage were verified to remain within the acceptance criteria for each EDS battery charger. The current and voltage values were recorded in Reference 1 and demonstrate the EDS battery chargers meet the acceptance criteria.

Additionally, the FAT was performed and followed the guidance of NEI 08-01 Section 9.4 (Reference 3) for the as-built tests to be performed at other than the final installed location.

The FAT tested the battery chargers per the applicable criteria of NEMA PE 5 and were operated for 12 hours as indicated by recording of internal equipment temperatures of the chargers. The FAT tested the chargers in Boost mode for each charger, where the output current was maintained at 1000 ADC (950 ADC at 140 VDC) with an output voltage ranging from 91 VDC to 140 VDC, all while the input 3-phase AC source was varied from 408 to 528 VAC. The results are documented in Reference 2.

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The combination of the results from the FAT and the Unit 4 component test results confirm that each EDS as-built battery charger provided an output current of at least 900 amps with an output voltage in the range 105 to 140 V.

The Unit 4 component test package work order results (Reference 1) and the FAT results (Reference 2) are available for NRC inspection as part of the Unit 4 ITAAC 2.6.02.02a Completion Package (Reference 4).

ITAAC Finding Review

In accordance with plant procedures for ITAAC completion, Southern Nuclear Operating Company (SNC) performed a review of all ITAAC findings pertaining to the subject ITAAC and associated corrective actions. This review found that there are no relevant ITAAC findings associated with this ITAAC. The ITAAC completion review document is included in the Vogtle Unit 4 ITAAC Completion Package for ITAAC 2.6.02.02a (Reference 4) and available for NRC inspection.

ITAAC Completion Statement

Based on the above information, SNC hereby notifies the NRC that ITAAC 2.6.02.02a was performed for VEGP Unit 4 and that the prescribed acceptance criteria are met.

Systems, structures, and components verified as part of this ITAAC are being maintained in their as-designed, ITAAC compliant condition in accordance with approved plant programs and procedures.

References (available for NRC inspection)

- 1. SV4-EDS-ITR-800593, Rev. 0, "Unit 4 Recorded Results of Battery Charger Testing: ITAAC 2.6.02.02a"
- 2. SV4-DC02-VQQ-001, Rev.0, "Quality Release & Certificate of Conformance"
- 3. NEI 08-01, Rev. 5 corrected, "Industry Guideline for the ITAAC Closure Process Under 10 CFR Part 52"
- 4. 2.6.02.02a-U4-CP-Rev0, ITAAC Completion Package